A Study on Global Orientation in New Product Development among Small and Medium-Sized Firms[*]

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Abstract

While many small and middle-sized enterprises are entering into emerging markets to satisfy diverse consumer needs, limited attention has been given to global orientation in new product development among these small and middle-sized enterprises in emerging markets. In order to find the antecedents and consequences of this managerial value, we have developed and tested a model of global orientation in new product development among small and middle-sized enterprises. Specifically, we hypothesize that customer orientation and long-term focus have a positive influence on the global orientation among small and middle-sized enterprises, which in turn has a positive effect on performance. Data collected from 482 firms supports the model. Theoretical and managerial implications are discussed.

Keywords: Global orientation in new product development, Customer orientation; Long-term focus

INTRODUCTION

With rapid growth towards globalization in the marketplace, many firms have adopted global orientation in new product development, considering a homogenous or similar set of customers across diverse markets from the start. Global orientation in new product development is a firm's strategy to target similar set of customers across multiple markets and to make marketing decisions on a global basis (Quelch and Knoop 2006). From the beginning stage of product development, firms adopt global orientation in new product development for production efficiency, quick market entry, and better financial performances (Eppinger and Chitkara 2006; Filatotchev et al. 2009; Kotabe and Helsen 2008; Quelch and Knoop 2006; Zhou et al. 2007).

The focus of this study is to develop a model of global orientation in new product development, particularly in the context of small and medium-sized firms in emerging markets. Global orientation in new product development is a firm's value for new product development with global customers in mind (Filatotchev et al. 2009; Hamel and Prahalad 1994; Quelch and Knoop 2006). In order to adopt and implement global orientation in new product development, firms need to be responsive to the needs of the customers across diverse markets. In addition, globally oriented firms need to have a long-term commitment to the various markets. Given that global orientation requires a significant amount of commitment to various customer segments over a long period of time, our conceptual model posits that long-term orientation and customer orientation are the factors that affect global orientation in developing new products.

Despite some earlier studies on global orientation, most of which are done in the developed countries (Keegan 1969; Wind 1977). We still have a limited understanding global orientation in new product development among small and medium-sized firms. The question still remains: What would be the effect of customer orientation and long-term focus on the adoption of global orientation in developing new product development? What are the performance implications of global orientation in new product development?

The main purpose of this paper, therefore, is to develop and test a model on global orientation among small and medium-sized firms in the emerging markets. Guided by recent advancements in

studies on new product development and marketing strategies in emerging markets, we develop a conceptual model of antecedents and consequences of global orientation in developing new products among small and medium-sized firms (Cui and Lui 2001; Lin and Ke 2010; Sun and Wu 2004). Specifically, we tested the mediation effect of global orientation in new product development in the relationship between its antecedents and performance outcome.

A better understanding on the model of global orientation in new product development among small and medium-sized firms will facilitate theoretical advancement in this stream of research. In addition, a better understanding on factors affecting global orientation in new product development will help managers to adopt global orientation effectively.

This paper is organized as follows by first, introducing the construct of global orientation in new product development among the small and medium-sized firms. Then we suggest the conceptual model and hypotheses related to global orientation in new product development. And lastly, the method, empirical results, and managerial implications are discussed.

CONCEPTUAL DEVELOPMENT

Global Orientation in New Product Development

Global orientation in new product development refers to as a firm's tendency to develop a new product with consumers in multiple countries in mind (cf. Quelch and Knoop 2006). Global orientation provides firms with many benefits including increased production efficiencies, enhanced innovative capabilities, and increased competitive advantages (Geringer et al. 1989; Hitt et al. 1997; Takeuchi and Porter 1986).

Global orientation in new product development is a managerial value in developing a new product. Marketers with global orientation in new product development are likely to develop a new product with global customers in mind. Global orientation in new product development requires an understanding of global customer's needs with an integration of marketing efforts across markets (De Brentani et al. 2010).

The concept of global orientation in new product development is

Table 1. Global orientation (in new product development) vs. product standardization
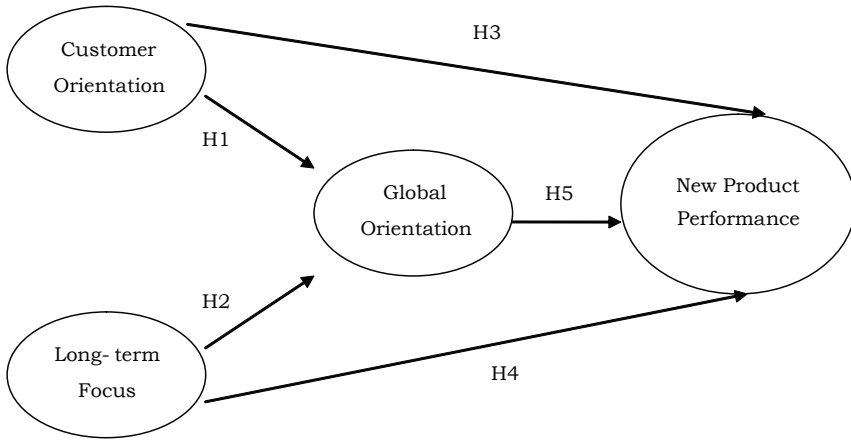
	Global orientation (in new product development)	Product standardization
Nature of the concept	Strategic intent	Strategic outcome
Key driver of the concept	Global customer's need	Cost efficiencies
Marketing activities	Customer oriented Long-term oriented	Production oriented Short-term oriented
Key success factor	Sharing of managerial value with the organization	Economies of scale and scope
	Integration and coordination of marketing activities across the national and regional markets	Reduction of cost

Notes: De Brentani, Kleinschmidt, and Salomo (2010); Wren, Souder, and Berkowitz (2000); Kotabe and Helsen (2008); Filatotchev et al. (2009); Cadogan et al. (2001); Powers and Loyka (2006).

different from product standardization (table 1). Global orientation in new product development is a managerial value driven by customer orientation and long-term orientation. Global orientation in new product development requires firms to integrate and coordinate new product development activities across diverse markets with global customer's needs in mind. In contrast, product standardization is the strategic outcome driven mainly by production efficiencies and by nature short term orientated. Product standardization leads firms to focus more on reduction of costs as it is largely driven by production efficiencies (De Brantaniet al. 2010; Kotabe and Helsen 2008; Filatotchev et al. 2009; Wren et al. 2000).

A Model of Global Orientation in New Product Development

Figure 1 shows the conceptual model of our research. Specifically, we hypothesize that customer orientation and long-term focus have a positive influence on the global orientation in new product development, resulting in a positive influence on performances in new product development. The rationales behind the conceptual models are as follows:

Figure 1. The Conceptual Model

First, firms with global orientation in new product development better understand the needs of customers across different markets and thus are capable to target a similar set of customers across different markets. That is, firms with global orientation in new product development need to be customer-oriented so that they can better understand the customer needs and develop new products accordingly. Second, firms with global orientation in new product development are likely to have a long-term commitment to multiple markets. Firms accomplish this through conducting extensive market research and target customers with similar needs across different markets. Firms with a short term orientation would not conduct extensive research for multiple markets and will simply seek short-term profit maximization. Without long-term orientation, firms are shortsighted with a focus on the current market to maximize profit and would not adopt global orientation in new product development. Third, firms with global orientation in new product development are likely to perform better than firms without global orientation since global orientation allows firms to better serve customers and better integrate marketing activities across different marketers.

The Effect of Customer Orientation on Global Orientation in New Product Development

Customer orientation is defined as a firm's belief that customer needs and satisfactions are the priority of the firm's marketing activities (Narver and Slater 1990). Firms with customer orientation place a high emphasis on the needs of customers and incorporate the information into the new product development process (Cooper and Kleinschmidt 2007).

Firms with global orientation in new product development understand the needs of customers across different markets and should be able to target a similar set of customers across different markets. That is, firms with global orientation in new product development are customer-oriented so that they can better understand customer needs and develop new products accordingly. As customer orientation offers the opportunities to better understand the needs of customers in different countries, customer orientation of a firm has a positive influence on the firm's global orientation in new product development (Kahn 2001; Nambisan 2002; Narver et al. 2004). In other words, firms are more likely to pursue global orientation in new product development when they are customer-oriented (Wren et al. 2000) as customer-oriented firms are likely to have a deeper level understanding of converging customer needs in different countries (Hasanet al. 2003). Based on the discussion, it can be hypothesized that:

> **H1:** Customer orientation of a firm has a positive influence on the firm's global orientation in new product development.

The Effect of Long-Term Focus on Global Orientation in New Product Development

Firms with global orientation are likely to monitor changing customer needs across diverse markets in order to identify common underlying needs (Samiee and Roth 1992). As efforts requires considerable long term commitment to the market, only firms with long-term focus to the market can adopt and implement global orientation strategy in new product development (Eppinger and Chitkara 2006; Lin and German 2004; Slater and Narver 1998).

Firms with a short-term focus are less likely to make such extensive efforts (Cadogan et al. 2001; Kotabe et al. 2002). Based on the discussion, it can be hypothesized that:

> **H2:** Long-term focus of a firm has a positive influence on global orientation in new product development.

The Effect of Customer Orientation on New Product Performance

Customer orientation facilitates responses to customers' current needs and even aids with proactive strategic planning (Narver et al. 2004). Firms with customer orientation are likely to better identify innovation opportunities in the current market places (Li et al. 2006; Slater and Naver 1995). In addition, firms with customer orientation are likely to have more customers' involvement in the new product development process and thus better in detecting underlying needs among consumers (Lin and German 2004).

We envision a positive relationship between customer orientation and new product performance. This is because customer orientation allows firms to better identify customers' needs and motivate firms to develop products that serve customers better, thereby increasing customer satisfaction and long-term loyalty to the firm (Gatignon and Xuereb 1997; Kahn 2001; Li Liu and Zhao 2006; Salomo et al. 2003). Based on the discussion, we propose the following:

> **H3:** Customer orientation of a firm has a positive influence on the firm's new product performance.

The Effect of Long-Term Focus on New Product Performance

In order to achieve high performance in new product development, firms needs to be responsive to the changing environment and be willing to take a risk under uncertainties (Jaworski and Kohli 1993). Firms need to have a long-term commitment to the market in order to monitor market changes and to take calculated risk in the marketplace.

We expect that a long-term focus of a firm in an emerging market to have a positive influence on its new product performance. Long-term focus of a firm will allow the firm to develop new products that serve customers well over a long period time. Firms with a long term

focus mindset will make conscientious efforts to learn more about customers and develop new products that serve customers well over the long run. All these efforts will generate customer trust and long-term commitment to the firm, generating high performance in new product development (Calatone et al. 2002; Senge 1990; Sethiet al. 2001; Wei and Morgan 2004). Based on the discussion, it can be hypothesized that:

> **H4:** Long-term focus of a firm has a positive influence on new product performance.

The Effect of Global Orientation in New Product Development on New Product Performance

Firms with global orientation in new product development are likely to be sensitive to global market trends, responsive to global market opportunities, and exploit new ideas and knowledge on global product innovation (Bartlett and Ghoshal 1990; Takeuchi and Porter 1986).

This study posits that firms with global orientation in new product development are likely to have higher performance in their new product development. This is because, firms with global orientation in new product development are more efficient in acquiring new market information and can better serve their customers, resulting in higher customer loyalty (Parry and Song 1994). In addition, firms with global orientation in new product development are more effective in identifying new market opportunities. All these will lead to higher performance in new product development. Based on the discussion, it can be hypothesized that:

> **H5:** Global orientation in new product development has a positive influence on new product performance.

METHOD

In order to test the model in figure 1, we conducted a mail survey of small and medium-sized Chinese firms. The details on the interview and survey procedures are as follows.

Development of Survey Instrument

To gain preliminary insight into the focal phenomenon, we first carried out a series of field interviews to identify key informants qualified for answering the survey (Philips and Bagozzi 1986).

We first conducted in-depth personal interviews with senior managers in 12 manufacturing small and medium-sized firms in Shanghai and Guangzhou, China. We selected small and medium-sized Chinese firms as our sampling frame since (1) China is a rapidly growing market with huge potential and customer needs are heterogeneous across the region and (2) Chinese small and medium-sized firms have demonstrated high growth in the national exports and the global market share (Lin and Ke 2010; Sun and Wu 2004). Data from national survey in China indicate that consumers from various regions are significantly different from one another in terms of purchasing power, attitude, consumption patterns, and among others (Cui and Liu 2001).

In order to increase variance in our responses, we deliberately included firms from various industries. Our initial contact was the top executive of each firm, who then designated a senior manager for our in-depth interviews. Each interview lasted between one to two hours. During the interview, we asked the managers about the process of new product development, key decision makers within the organization for new product development, and new product performance. The results were then compiled, and the field perspective integrated with the literature-based perspective.

Through the interviews, a set of questionnaire items was generated for each of the variables of interest. A panel of bilingual academic experts assessed the constructs and corresponding measures in terms of content adequacy and items were modified as necessary. After the minor revisions, a team of bilingual Chinese scholars whom had completed doctoral degrees in the North America translated the questionnaire into Chinese. Two independently translated it into Chinese while another two independently back-translated it into English. The entire translation team and one of the authors then resolved any translation discrepancies. Subsequently, we pre-tested the Chinese questionnaire by administering it to 50 students registered in executive MBA classes in Shanghai, China. These students were managers of manufacturing firms in various

industries. The pre-test results suggested that the questionnaire qualified as a survey instrument and ready for finalization.

Mail Survey

Because it is very time-consuming to collect survey data from firms in China (Li and Atuahene-Gima 1999; Roy et al. 2001), we initially contacted a renowned Chinese university. In order to increase the response rate, a research team at the university endorsed the cover letter and questionnaire, and promised to send an executive summary of the final results upon completion of the study. This university has an excellent reputation in research and liaison with local small and medium-sized firms. To take advantage of the social network, we asked a group of researchers from the business school at the university to conduct the survey.

The data was collected through a survey of small and medium-sized firms in Shanghai and Guangzhou. Both cities are metropolitan areas of China that represent major manufacturing bases, which consist of both state-controlled enterprises and foreign-funded enterprises. Although a nation-wide survey would have be more desirable to capture a more complete picture, such an attempt is practically unfeasible, given the geographical diversity of the nation and the significant amount of resources that would be needed (Jeong et al. 2006).

For this phase of our study, the sampling frame consisted of all manufacturing small and medium-sized firms with registered capital more than 100 thousand but less than 1 million RMB (1RMB=0.15USD), listed with the Shanghai Industrial Bureau and Guangzhou Industrial Bureau. Based on the kth-entry-on-every-nth-page rule, we randomly selected 300 firms as our final survey sample. We sought contacts with qualified informants in two ways. When possible (e.g., listed names, telephone contacts), we identified a knowledgeable member (e.g., vice president in product development) of the organization and directed the survey instrument to him/her. Otherwise, we requested a senior executive (CEO or president) either to complete the survey personally or designate the most qualified senior-level manager to provide data on behalf of the firm.

We adopted a three-wave mailing procedure to encourage respondent involvement and enhance the response rate. The first

Table 2. Sample characteristics

Organizational characteristics	Number (%)	
Ownership		
Government-owned	277	(61.8)
FDI	44	(9.8)
Joint stock	47	(10.5)
Collectively-owned or privately-owned	54	(12.1)
Domestic JV	15	(3.3)
FDI (foreign JV)	11	(2.5)
Business Category		
Raw materials	46	(10.3)
Intermediate goods	71	(15.8)
Consumer durables	141	(31.5)
Consumer nondurables	79	(17.6)
Other	110	(24.6)
No response	1	(0.2)
Annual Sales		
Below 5 million	33	(7.4)
5-20 million	108	(24.1)
21-100 million	163	(36.4)
101- 500 million	105	(23.4)
Over 500 million	29	(6.5)
No response	10	(2.2)
Ratio of international sales		
Below 1%	134	(29.9)
1-9%	108	(24.1)
10-29%	91	(20.3)
30-50%	36	(8.0)
Over 50%	40	(8.9)
No response	39	(8.7)
Total	448	

and third mailings consisted of a copy of the questionnaire, a cover letter and a return envelope; the second was a reminder letter. There was a two-week interval between the waves. Consistent with the definition of the construct, we instructed each informant to provide responses in relation to a particular business unit with which he or she was primarily associated.

On the basis of returned mail and correspondence, 22 firms out of 568 firms contacted were no longer in business or unavailable (e.g., due to movement to other regions), while 10 firms declined to complete the survey (e.g., company policy). In each firm, the key

informant was either a general manager or a manager. In total, 482 usable questionnaires were received, representing an effective response rate of 93.9%. The response rate is comparable with that of other recent studies on Chinese businesses (Calantone et al. 1996). The final sample included firms from a variety of industries, including telecommunications, chemicals and pharmaceuticals, clothing and textiles, computers and related products, machinery and instruments, electronics and electrical equipment, and transportation equipment. The firms also ranged in size from 33 firms (or 7.4% of the sample) with annual sales less than $5 million, to 29 firms (or 6.5% of the sample) greater than $500 million. The summary profiles of the sample firms are shown in table 2.

Measures

All multi-item measures are based on 7-point Likert scales, from 1 (strongly disagree) to 7 (strongly agree). We examine the unidimensionality and convergent validity of the constructs via confirmatory factor analysis. The pattern of observed loadings indicates that the multi-item scales measure independent constructs, thus further supporting the unidimensionality and convergent validity of the scale.

Global Orientation in New Product Development. The measure of global orientation in new product development is composed of two items mainly based on a scale developed by Cooper and Kleinschmidt (1985) and Douglas and Craig (1992). The items were as follows: (1) we make marketing decisions on new products on a worldwide basis; and (2) we divide a market into smaller groups that are similar in at least one aspect and differ from other groups and then connect many countries world-wide. The average variance extracted (AVE) for this scale is 0.705, exceeding the recommended criterion of 0.50.

Customer Orientation. Based on the studies of Calatone et al. (1996) and Slater and Narver (1995), we measured customer orientation using survey items. These items describe customer orientation related to NPD and are as follows: (1) product innovation ideas are derived from the markets (customers and distributors) served by the firm; (2) in all countries in which we compete, our new

products should prove to be of superior value compared to those of competitors; and (3) compared to competitors, we develop new products that are more responsive to the customers. The average variance extracted (AVE) for this scale is 0.646.

Long-Term Focus. Long-term focus was measured by three items mainly based on Song et al. (2000) and Sethi et al. (2001). The three items were: (1) we emphasize basic research that may provide us with long-term benefits; (2) we constantly monitor significant long-term demand trends in major markets; and (3) we have a long-range plan for future development of new products. The average variance extracted (AVE) for this scale is 0.596.

New Product Performance. For an in-depth examination of the relationship between global orientation and new product performance, we employed diverse measures of new product performance. After a review of prior research, and also aided by managerial input from the field interviews, we identified a set of performance measures. While these measures are not exhaustive, they represent key performance criteria that are widely used for evaluating new product performance in manufacturing businesses (e.g., see Page 1993). Specifically, we attempt to capture four performance dimensions – customer acceptance of new products, a number of new products developed, contribution to sales, and profitability. It should be noted that, in completing the questionnaire, the respondents were asked specifically to evaluate the worldwide performance of new products on each of the five dimensions. The average variance extracted (AVE) for this scale is 0.68, showing evidence of reliability.

For measuring new product performance, we chose to rely upon the managers' judgment for the following reasons. First, the majority of previous NPD studies have used qualitative criteria to measure performance (Griffin and Page 1993). Second, as far as new products are concerned, there are few program-level performance measures that are commonly accepted across firms and industries (Page 1993). Nearly all of the objective performance measures employed in marketing research, such as ROI and ROA, deal with the performance of "old" products as well as "new" ones. Third, in an attempt to examine the general reliability of our performance measures, we consulted various secondary sources

(e.g., 10Ks, COMPUSTAT) to collect data on two types of accounting performance – return on equity (ROE) and return on assets (ROA).

Reliability Analysis

We first examined whether our data met the assumed multivariate normal distributions. Non-normal data may inflate goodness-of-fit statistics and result in underestimated standard errors (MacCallum et al. 1992), and we evaluated skewness and kurtosis. Our dataset passed the criteria of both skewness and kurtosis. Because the slope of the normal probability plot was very close to 1, we came to the reasonable conclusion that our data did not violate the assumption of normal distribution.

Next, we performed confirmatory factor analysis using LISREL to estimate convergent and discriminant validity. We assessed our model's fit using a chi-square test. The descriptive statistics in table 3 show basic information for each factor and correlations among them.

Composite reliability draws on the standardized loadings and measurement error for each item. A rule of thumb is that 0.6 is an acceptable threshold for composite reliability (Nunnally 1978; Shook et al. 2004). In our analysis, all constructs displayed satisfactory levels of reliability, as indicated in table 4. The LISREL-based composite reliability estimates for each dimension were 0.646, 0.596,

Table 3. Descriptive statistics and correlation

	Global orientation (in new product development)	Customer orientation	Long-term focus	Performance
Global orientation (in new product development)	1.000			
Customer orientation	0.611 (11.291)	1.000		
Long-term focus	0.786 (15.118)	0.707 (13.691)	1.000	
Performance	0.412 (7.187)	0.429 (7.867)	0.584 (11.057)	1.000

Note: Numbers in parenthesis is standard error.

Table 4. Results of confirmatory factor analysis

Construct	Measure		Factor Loading	t-value	AVE
Customer orientation	CO1	Product innovation ideas are derived from the markets (customers, distributors) served by the firm	0.509	9.996	0.646
	CO2	In all countries we compete, our new products should prove to be of superior value compared to those of competitors	0.597	11.925	
	CO3	Compared to competitors, we develop new products that are more responsive to the needs of customers	0.798	15.967	
Long-term focus	LF1	We emphasize basic research that may provide us with a long-term benefit	0.485	9.529	0.596
	LF2	We constantly monitor significant long-term demand trends in major markets	0.664	13.480	
	LF3	We have a long-range plan for future development of new products	0.625	12.652	
Global Orientation	GO1	We make marketing decisions about new products on a worldwide basis	0.614	12.064	0.705
	GO2	We divide a market into smaller groups that are similar in at least one aspect and differ from other groups.	0.786	14.806	
New Product Performance	PER1	Number of new products introduced into the market	0.543	11.180	0.680
	PER2	Customer acceptance of new products	0.627	13.256	
	PER3	Percentage of sales which come from new products	0.773	17.072	
	PER4	Attaining profitability goals	0.752	16.526	

x^2(p-value) = 79.611(.00), df =48; GFI = 0.971; CFI = 0.976; NFI = 0.943; RMSEA = 0.038

0.705, and 0.680, respectively. The reliability estimates, accordingly, were considered acceptable.

Construct Validity

A confirmatory factor analysis of the four-factor measurement model for the 12 indicators suggested a satisfactory overall fit, as demonstrated by GFI, CFI, NFI, and RMSEA scores of 0.971, 0.976, 0943, and 0.038, respectively. The Chi-square statistics of our total measurement model were significant (x^2 = 79.611, df = 48, P = 0.00). All of the standardized item loadings were significant to the hypothesized constructs. Average variances extracted (AVE) values are sufficiently high, showing the evidence of construct reliability (0.646 for customer orientation, 0.596 for long-term focus, 0.705 for global orientation, and 0.680 for performance). We then examined discriminant validity by conducting pairwise tests of all theoretically related constructs (Shook et al. 2004). The pairwise correlations between the constructs were compared with the estimates of average variance extracted (AVE) for the applied constructs. Discriminant validity is confirmed when both AVE estimates exceed the square of the correlation between the constructs that make up the pair. As table 3 shows, the square roots of all AVE estimates presented in the diagonal line were significantly higher than the correlations between constructs that made up each pair, which corroborated the discriminant validity of the analysis.
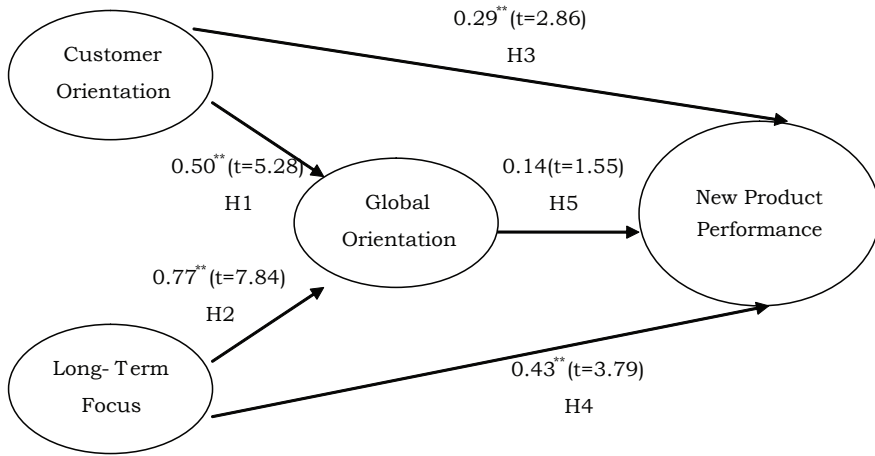
RESULTS

Evaluating Model Fit and Test of Hypotheses

The conceptual model in figure 1 was tested using structural equation modeling technique. The model provided a good fit to the data (x^2 = 30.257, df = 16, p = 0.00, GFI = 0.984, CFI = 0.985, NFI = 0.969, RMSEA = 0.042).

The results are summarized in figure 2. The results indicate that customer orientation has a positive influence on global orientation in new product development (estimate = 0.50, t = 5.28) and long-term focus has a positive impact on global orientation in new product development (estimate = 0.77, t = 7.84). These results

**: significant at 95% confidence level ($p < 0.05$)
Figure 2. The Results

provide support for hypothesis 1 and hypothesis 2.

The results also indicate that new product performance is positively influenced by customer orientation (estimate = 0.29, t = 2.86) and by long-term focus (estimate = 0.43, t = 3.79). These results provide support for hypothesis 3 and hypothesis 4.

The results show that global orientation in new product development has a marginally significant influence on new product performance (estimate = 0.14, t = 1.55), failing to provide support for hypothesis 5 ($p > 0.05$). Yet, the results of Sobel test in table 5 indicate that global orientation has a significant mediation effect in the relationship between customer orientation and new product performance (t = 5.437 p <0.05). The results also indicate that global orientation also has a significant mediation effect in the relationship between long-term focus and new product performance (t = 5.867, p <0.05).

In summary, most of our hypotheses in the model are supported by the data. Our analysis shows the direct effects of customer focus, long-term orientation, and global orientation on new product performance. In addition, it demonstrates that long-term focus and customer orientation have a positive influence on new product performance, mediated by global orientation in new product development.

Table 5. Test of mediation effects (Sobel test)

	Sobel-test statistic	Standard errors	p-value
Customer orientation-Global Orientation – New Product Performance	5.437	0.023	.00
Long-term focus- Global Orientation- New Product Performance	5.867	0.025	.00

DISCUSSION

The main purpose of our study is to develop and test a model of global orientation in new product development among small and medium-sized manufacturing firms in China. The results of our study largely support the model presented in figure 1.

First, our findings show that customer orientation and long term focus has a positive influence on global orientation of the firm. This implies that in order to effectively implement global orientation in new product development successfully, firms first need to be customer oriented and have a long-term focus to the market. As global orientation requires extensive efforts in understanding customer needs in diverse market over a long period of time, it is important for the firm to have managers of the firm share these managerial values so that they can avoid inter-departmental conflicts and effectively implement global orientation in new product development.

Second, our findings show that global orientation in new product development has a positive impact on new product performance in terms of the number of new products to market, customer acceptance, global share in new product development sales, and profitability. This suggests that managers in a firm need to share the understanding that global orientation in new product development in the emerging market is an important firm strategy that leads to high performance.

Third, our study demonstrates that both long-term focus and customer orientation has a direct and positive influence on new product performance. This implies that customer orientation and long term focus have a direct and significant impact on new product performance in addition to facilitating global orientation of a firm.

This finding reiterates importance of customer orientation and long term focus for small and medium sized firms in the emerging market (Calantone et al. 1996; Li et al. 2006; Jeong et al. 2006; Slater and Narver 1995).

There are several limitations of this study. First, this study used survey data in only two geographic locations in China - Shanghai and Guangzhou. Thus, caution should be used in generalizing the study findings to be applied elsewhere, less developed rural areas. Future studies should expand the study to other areas in China as well as lesser developed countries.

Second, this study was conducted at a specific point in time. Because of its cross-sectional nature, this study fails to explain the process of developing global orientation in new product development over time. Future longitudinal studies will help identify changes in orientation over time and their performance implications.

Third, this study does not formally incorporated cultural values in the model. Future cross-cultural studies can identify the role of cultural values in global orientation in new product development. Also, this study fails to incorporate the effects of environmental and organizational factors affecting global orientation in the model. Future study should examine the relative efficacy of managerial values as compared to environmental and organizational factors affecting global orientation in new product development.

Fourth, this study focused on performance consequences of global orientation in new product development. Global orientation in new product development can have consequences on other marketing mix variables including global branding, pricing, and purchasing. Future studies should examine these other consequences of global orientation in new product development.

Despite these limitations, this is the first study that develops and tests a model of global orientation in new product development in the context of emerging market. This study found that both customer orientation and long-term focus have a positive influence on global orientation in new product development, which in turn enhances new product performance. Understanding these results will help international players in the emerging market to develop guidelines on how to develop new products successfully. We hope future efforts will be directed toward identifying other antecedents and additional conditions that facilitate successful new product development.

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